

The State of New Hampshire

Department of Environmental Services



Michael P. Nolin Commissioner

August 10, 2005

To:

Resource Management, Inc.

From:

Anthony P. Giunta, P.G.

Director, Waste Management Division Department of Environmental Services

SUBJECT:

CERTIFIED WASTE-DERIVED PRODUCT NO. 18 - REVISED

WWTF SLUDGE INCINERATOR ASH AGGREGATE

Pursuant to Env-Wm 3207.05 and Env-Wm 3208 of the New Hampshire Solid Waste Rules (Rules), the Department of Environmental Services, Waste Management Division (Department) has added Wastewater Treatment Facility (WWTF) Sludge Incinerator Ash Aggregate (product) made with a mix of sludge incinerator ash (waste) and sand or stone dust to the Department's list of certified waste derived products. Use of the waste must adhere to Part Env-Wm 3202.04 of the Rules which are designed to protect public health and the environment. Before using the waste to produce the product, be sure to note any specifications or restrictions that have been placed on the use, storage, handling, and production of the waste and/or product.

Eight (8) waste and product specifications and restrictions are attached.

This certification granted by the Department shall not affect the user's obligation to obtain all requisite federal, state, or local permits, licenses or approvals, and to comply with all other applicable federal, state, district or local permits, ordinances, laws or approvals or conditions pertaining to the use of the product.

For permitting information and questions, please call the Department's Permitting and Design Review Section at (603) 271-2925 for assistance.

cc: PDRS CWDP File

<u>Certified Waste-Derived Product No. 18 - Revised</u> WWTF Sludge Incinerator Ash Aggregate Specifications and Restrictions

Wastewater Treatment Facility (WWTF) Sludge Incinerator Ash (SIA) Aggregate (product) shall be deemed certified for distribution and use under the following conditions:

- 1. SIA shall be from the Manchester WWTF, Manchester, New Hampshire or Saratoga County Sewer District #1 WWTF, Saratoga, New York.
- 2. SIA is derived from incineration of municipal sewage sludge generated at a WWTF using a fluidized bed incinerator. The ash is then scrubbed with plant water, and the resulting ash/water slurry is then conveyed to a lagoon for storage. Every six months the ash is dewatered and stockpiled in anticipation of removal.
- Following dewatering and storage at a WWTF, the SIA will be delivered to the blending site where it will be stored for no longer than 7 days prior to blending. Stockpiles of SIA will be limited to 1,000 cubic yards at any given time, and site access will be restricted for all areas where SIA is stored prior to blending. Stockpiles are to be actively managed and shall comply with the universal facility requirements of Env-Wm 2700 of the New Hampshire Solid Waste Rules (Rules).
- 4. Sand or stone dust is blended with the SIA using a front-end loader and/or bulldozer at a 3:1 ratio. The final product is then available for use as a construction aggregate or topsoil component.
- 5. The aggregate shall be tested for arsenic, cadmium, chromium (III and VI), lead, mercury, nickel, selenium, silver, and zinc prior to distribution to document compliance with the Maximum Screening Concentrations listed in Item 6.
- 6. Maximum Screening Concentrations (mg/kg):

| Metals | Screening Concentrations (mg/kg) ¹ |
|--------------|---|
| Arsenic | 11 |
| Cadmium | 32 |
| Chromium III | 1000 |
| Chromium VI | 130 |
| Lead | 400 |
| Mercury | 13 |
| Nickel | 580 |
| Selenium | 260 |
| Silver | 45 |
| Zinc | 1000 |

Notes: Equivalent to Risk Characterization and Management Policy (RCMP) S-1 standards for protecting groundwater.

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- 7. The aggregate shall not be distributed or used in any:
 - a. Residential applications;
 - b. Playground applications;
 - c. Fill in a 100-year floodplain or wetland
 - d. Application to land used for the production of crops for direct human consumption;
 - e. Application within a recharge area of any sole source drinking water supply; or
 - f. Within 100 feet from any surface water.
- 8. The distributor shall comply with the product disclosure requirements in Env-Wm 3202.04 and the recordkeeping requirements in Env-Wm 2205.07(f) of the Rules.